WHAT IS CLAIMED IS:

1. A method for storing data by positioning a write head over a moving storage medium and providing a write current to the write head, the method comprising:

detecting a writing error;

suspending the write current in response to the writing error while allowing the storage medium to continue moving;

repositioning data that would have been stored during the suspending of the write current; and

supplying write current to store the repositioned data on the storage medium.

2. The method of claim 1 wherein error correction information is encoded in the data on the storage medium and wherein the step of detecting a writing error comprises:

comparing data written to the storage medium to data read from the storage medium to detect errors in the data; and

wherein the steps of repositioning data and supplying write current to store the repositioned data are performed if errors in the data exceed a threshold based on capability of the encoded error correction information to recover the data that would have been stored.

3. The method of claim 1 wherein error detection and correction information is encoded in the data on the storage medium and wherein the step of detecting a writing error comprises:

reading the error detection information to detect errors in the data; and

wherein the steps of repositioning data and supplying write current to store the repositioned data are performed if errors in the data can not be corrected using the encoded error correction information.

4. The method of claim 1 wherein the step of detecting a writing error comprises:

indicating a writing error based on positioning of the write head relative to the storage medium.

5. The method of claim 4 wherein the step of detecting a writing error comprises:

indicating a writing error based solely on positioning of the write head relative to the storage medium.

6. The method of claim 1 wherein the storage medium includes write head positioning information and wherein the step of detecting a writing error comprises:

indicating a writing error based on the write head positioning information.

7. The method of claim 1 wherein the storage medium comprises a tape.

8. The method of claim 1 further comprising:

measuring span of the writing error; and

repositioning and writing the data only if the span of the writing error is less than a corresponding threshold.

9. The method of claim 1 further comprising:

formatting data for writing by grouping data into sub-blocks, adding sub-block sequencing information, write pass information, and error detection information to each sub-block of the data.

10. The method of claim 1 further comprising distinguishing current data from previously written data stored on the storage medium.

11. A system for storing data on a moving storage medium, the system comprising:

a servo position control for positioning a read/write head relative to the storage medium and providing a tracking signal indicative of read/write head position relative to tracking information on the storage medium; and

a processor for grouping data to be stored on the storage medium, adding write pass information, and encoding error correction and detection information in the data, and selectively supplying a write signal to the read/write head to store the data on the storage medium wherein the processor suspends the write signal in response to detection of a writing error while allowing the storage medium to continue moving, selectively repositions data that would have been stored, and selectively supplies a write signal to store the repositioned data on the storage medium.

12. The system of claim 11 wherein the processor compares data written to the storage medium to data read from the storage medium to detect errors and selectively suspends the write signal if the errors exceed a corresponding threshold based on the error correction information.

13. The system of claim 11 wherein the processor selectively suspends the write signal based on positioning of the write head relative to the storage medium.

14. The system of claim 13 wherein the processor selectively suspends the write signal based solely on positioning of the write head relative to the storage medium.

15. The system of claim 13 wherein positioning of the write head relative to the storage medium is detected based on a comparison of data written to, and read from, the storage medium.

16. The system of claim 13 wherein positioning of the write head relative to the storage medium is detected based on write head tracking information stored on the storage medium.

17. The system of claim 11 wherein the storage medium comprises a magnetic tape having read/write head positioning information and a plurality of generally parallel data channels.

18. The system of claim 11 wherein the processor measures span of the writing error and repositions and writes the data only if the span of the writing error is less than a corresponding threshold.

19. The system of claim 11 wherein the processor measures span of the writing error and repositions and writes the data only if the span of the writing error is between first and second thresholds wherein the first threshold is based on the span and the error correction information.

20. The system of claim 19 wherein the second threshold is based on the span and capacity of the storage medium.

21. A computer readable storage medium having stored data representing instructions executable by a processor to control a data storage device that positions a write head over a moving storage medium and provides a write current to the write head, the computer readable storage medium comprising:

instructions for detecting a writing error;

instructions for suspending the write current in response to the writing error while allowing the moving storage medium to continue moving;

instructions for repositioning data that would have been stored during the suspending of the write current; and

instructions for supplying a write current to store the repositioned data on the moving storage medium.

22. The computer readable storage medium of claim 21 wherein error correction information is encoded in the data on the moving storage medium and wherein the instructions for detecting a writing error comprise:

instructions for comparing data written to the moving storage medium to data read from the moving storage medium to detect errors in the data; and

instructions for indicating a writing error if errors in the data exceed a corresponding threshold.

23. The computer readable storage medium of claim 21 wherein error detection and correction information is encoded in the data on the moving storage medium and wherein the instructions for detecting a writing error comprise:

instructions for reading the error detection information to detect errors in the data; and

instructions for indicating a writing error if errors in the data can not be corrected by the encoded error correction information.

24. The computer readable storage medium of claim 21 wherein the instructions for detecting a writing error comprise:

instructions for indicating a writing error based on positioning of the write head relative to the moving storage medium.

25. The computer readable storage medium of claim 24 wherein the instructions for detecting a writing error comprise:

instructions for indicating a writing error based solely on positioning of the write head relative to the storage medium.

26. The computer readable storage medium of claim 21 wherein the moving storage medium includes write head positioning information and wherein the instructions for detecting a writing error comprise:

instructions for indicating a writing error based on the write head positioning information.

27. The computer readable storage medium of claim 21 further comprising:

instructions for measuring span of the writing error; and

instructions for repositioning and writing the data if the span of the writing error exceeds a corresponding threshold.

28. The computer readable storage medium of claim 21 further comprising:

instructions for formatting data for writing by grouping data into sub-blocks, adding sub-block sequencing information, write pass information, and error detection information to each sub-block of the data.

29. The computer readable storage medium of claim 21 further comprising instructions for distinguishing current data from previously written data stored on the moving storage medium.